Sommershutdown: Rahmenaktivitäten UNILAC Controls Upgrade

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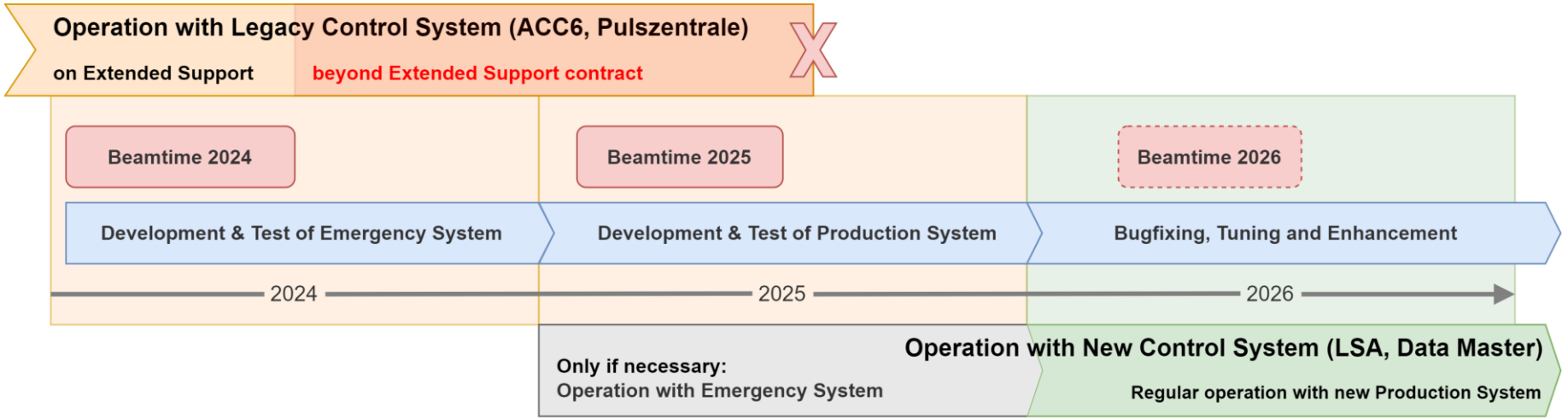
Injector Controls Upgrade Project

- Injector Controls Upgrade (ICU) project
  - Keep UNILAC operable now
  - Keep UNILAC operable in the future
- Final decommissioning of the running control system after beamtime 2025
  - Keep it alive and safe until then
- Develop new control system based on technology used for SIS18, ... FAIR
  - Highly complex endeavour: ~10 subprojects defined so far, stretching over many core areas of the control system, many basic new features required
  - Leave device and front-end layer as is
  - Several departments, dozens of contributors working coherently
- Strategy for the actual transition from legacy to new control system
  - Spring last year: several options reviewed against the beamtime schedule 2024-2026
  - June 2023: decision taken
  - Timeline elaborated, general requirements for shutdown period extracted

Operation and Development Strategy

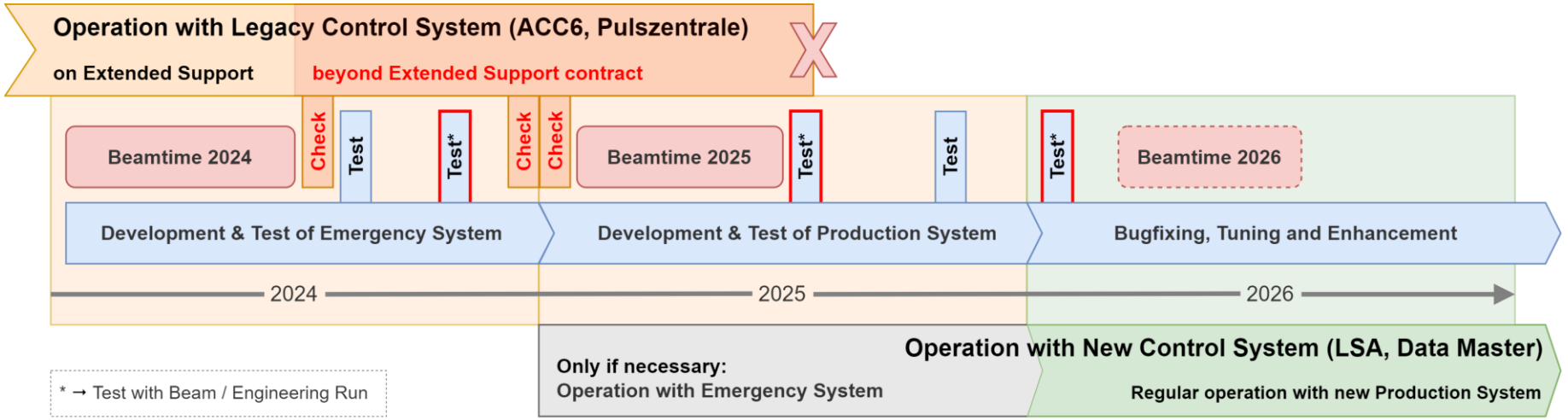
Overview



The Emergency System is an intermediate step towards the Production System!

Operation and Development Strategy

Shutdown requirements



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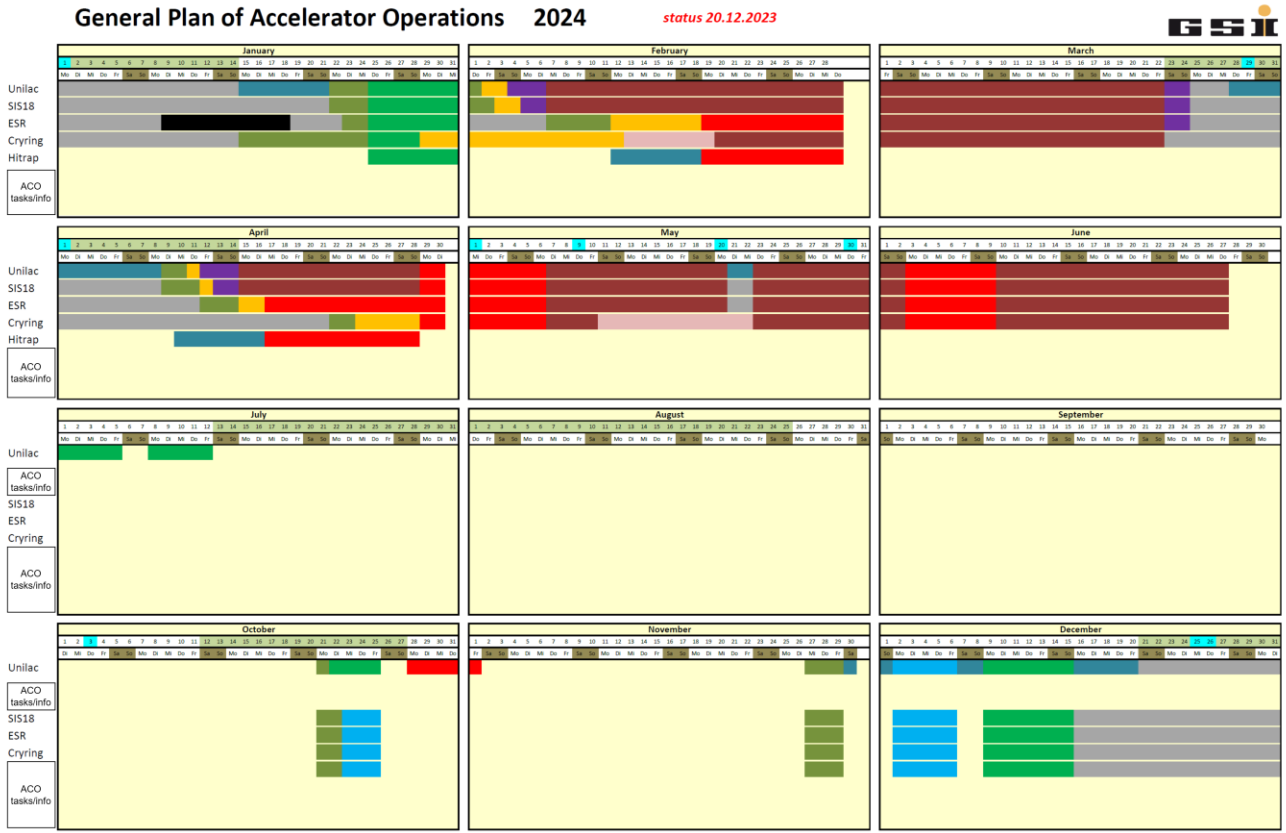
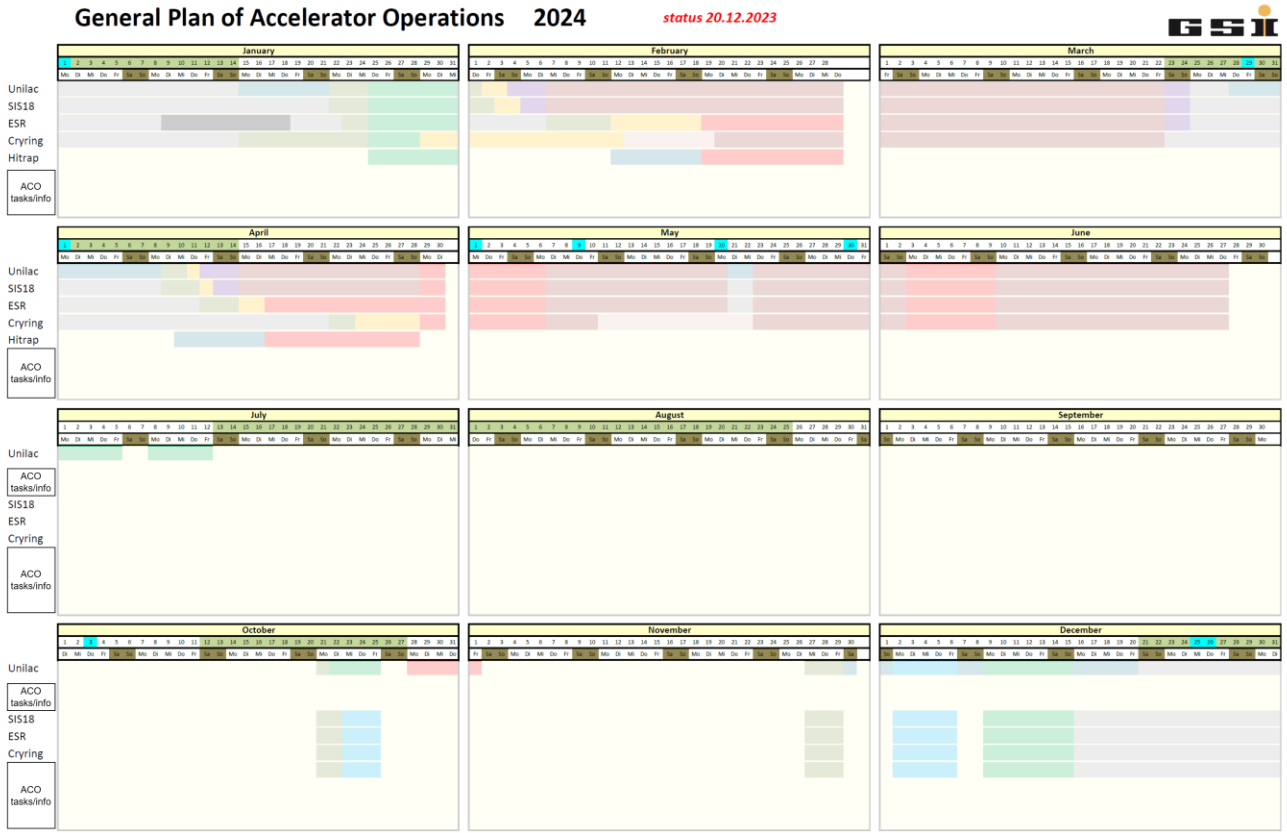
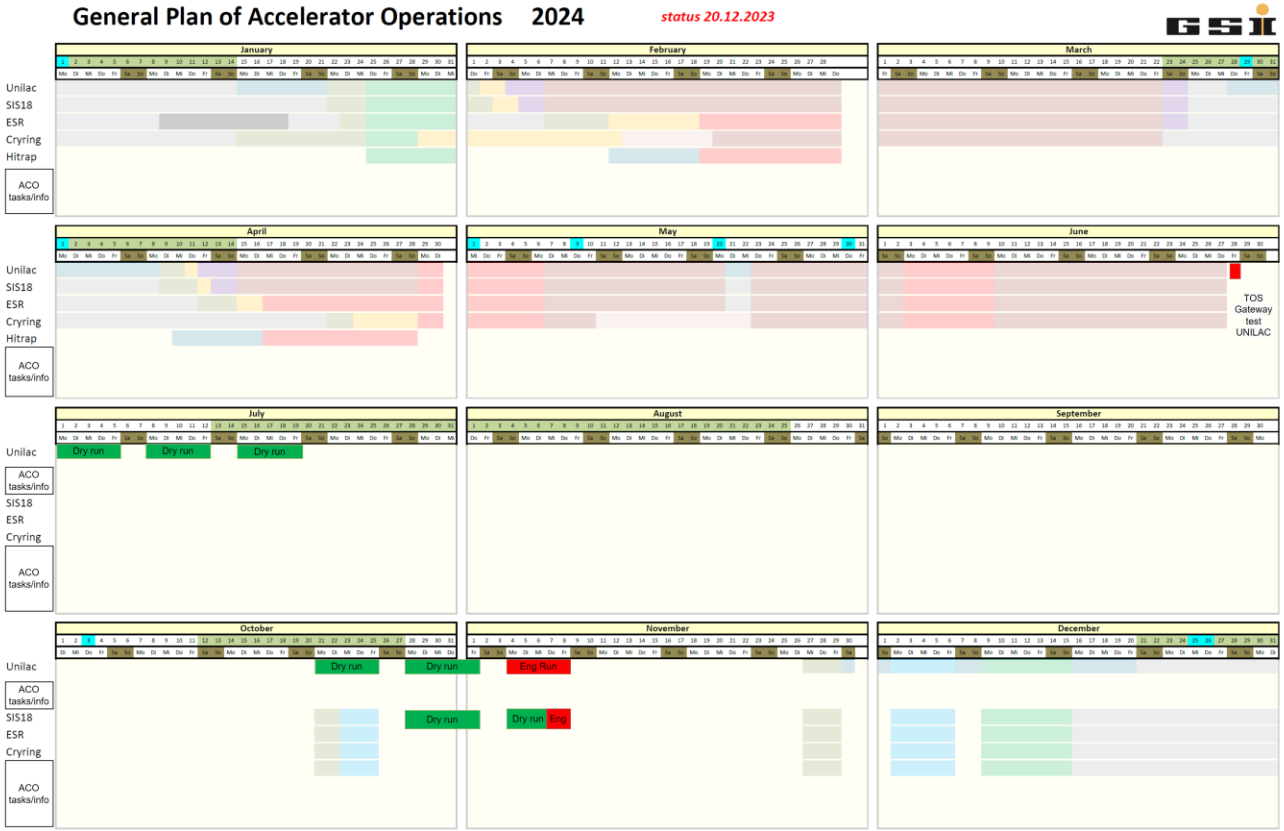
Detailed planning Shutdown 2024



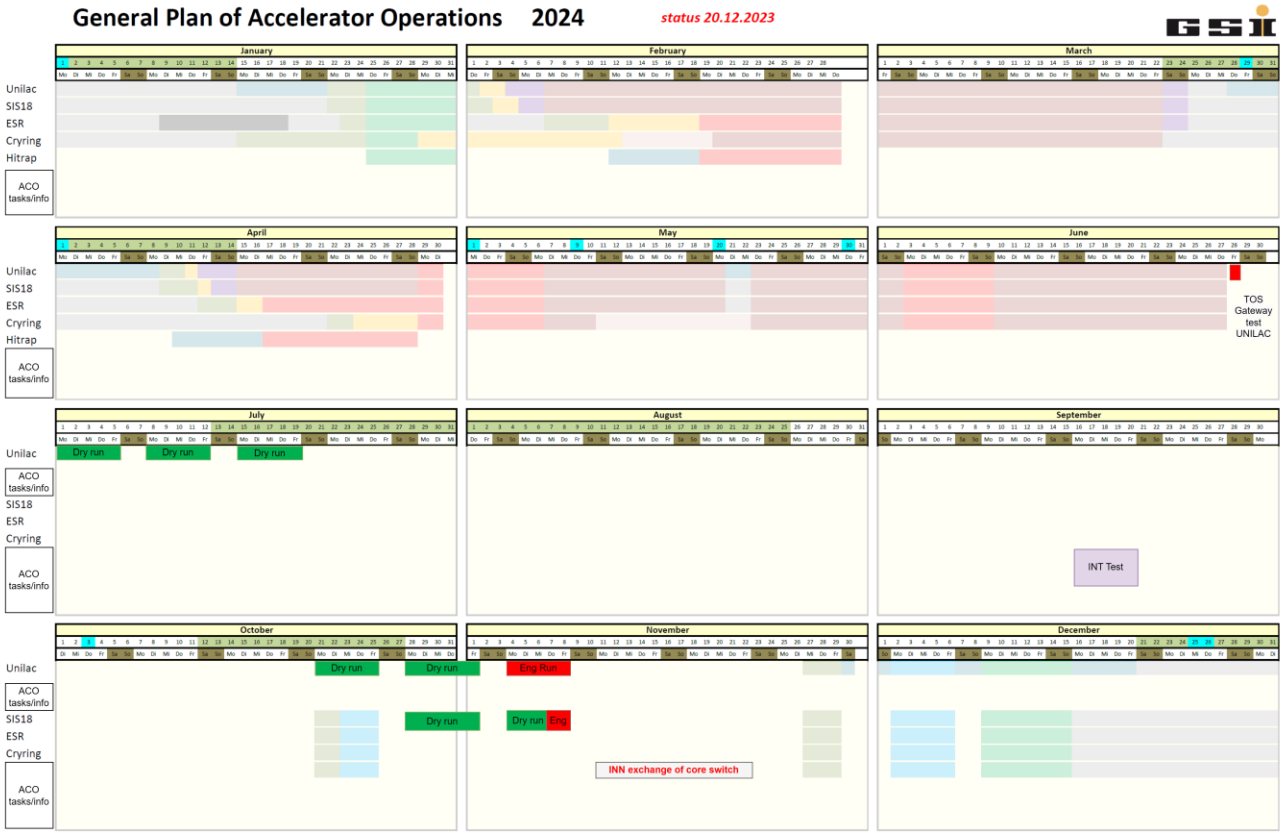
Detailed planning Shutdown 2024



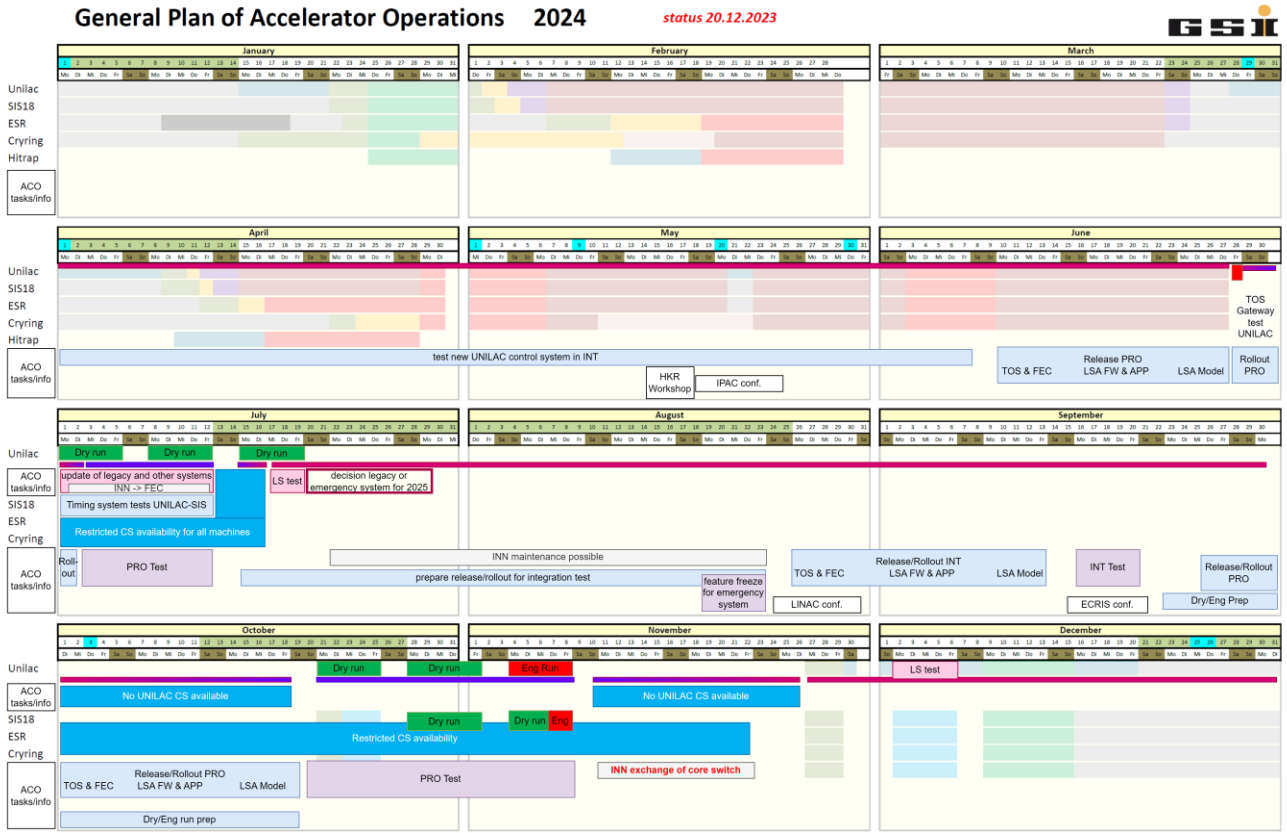
Detailed planning Shutdown 2024



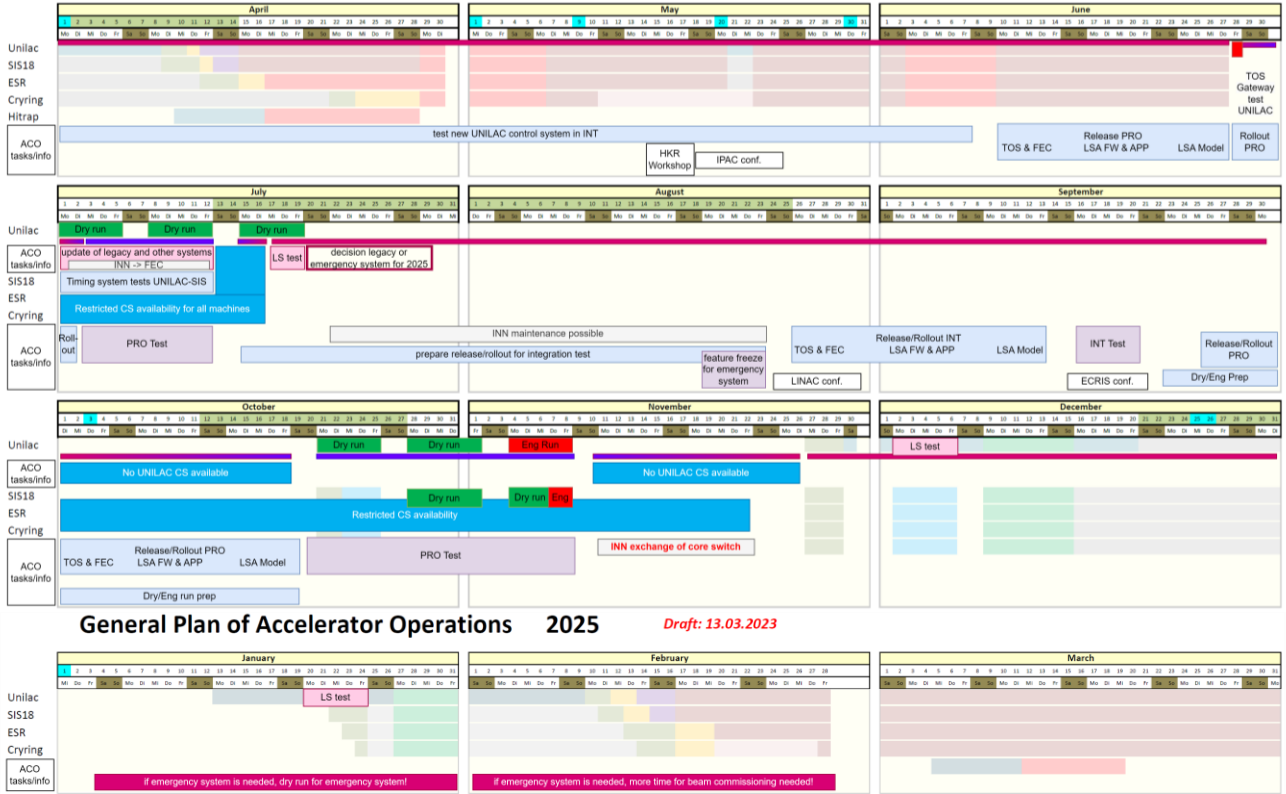
Detailed planning Shutdown 2024



Detailed planning Shutdown 2024



Detailed planning Shutdown 2024/25



Summary: Impact on Shutdown coordination

- Machines required for control system tests

Requirements	Goal
UNILAC: 28.6. (end of beamtime)	Gateway Test with beam
UNILAC: KW 27-29	Legacy System Test / Dry Run
UNILAC: KW 43-45 SIS18: KW 44-45	Dry Run (KW43/44) Engineering Run with beam (KW45)
UNILAC: KW 04/2025	Legacy System Test

  - Additional restrictions in CS availability apply
- Critical network infrastructure maintenance
  - Replacement of core switches for FAIR in KW 46-47

These tests are essential for UNILAC Control System development and indispensable for CS beamtime readiness 2025 and 2026!